

# UNPUBLISHED PRELIMINARY DATA

NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL

STATUS REPORT No. 2

December 1, 1964 - February 28, 1965

NASA Contract SC-NSR-09-012-901

**N65-82945**

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Postdoctoral and Senior Postdoctoral

Resident Research Associateship Program

for the

National Aeronautics and Space Administration

Office of Scientific Personnel  
National Academy of Sciences - National Research Council  
2101 Constitution Avenue, N. W.  
Washington, D. C. 20418

NATIONAL ACADEMY OF SCIENCES—NATIONAL RESEARCH COUNCIL

OFFICE OF SCIENTIFIC PERSONNEL

2101 CONSTITUTION AVENUE, N. W., WASHINGTON, D. C. 20418

FELLOWSHIP OFFICE

In reply please include

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NASA POSTDOCTORAL RESIDENT RESEARCH ASSOCIATESHIP PROGRAM

(Contract SC-NSR-09-012-901)

Status Report No. 2

This report contains a summary of the Associates on tenure during the reporting period December 1, 1964 - February 28, 1965, who were appointed or whose appointments were renewed under Contract SC-NSR-09-012-901. (Other Associates continue on tenure under Grant NsG-34-59/09-12-001 and are summarized in previous status reports)

The Associates included in this report are summarized by Center as follows:

Goddard Space Flight Center	
Institute for Space Studies	5
Greenbelt, Maryland . . . .	<u>13</u>
	18
Ames Research Center	
Biosciences . . . . .	8
Physical Sciences . . . . .	<u>6</u>
	14
Marshall Space Flight Center . . . .	1
Langley Research Center . . . . .	<u>2</u>
Total:	35

The following countries are represented: Australia - 2; China - 1; France - 2; India - 3; Iran - 1; Israel - 2; Italy - 3; Japan - 2; Korea - 1; South Africa - 1; Sweden - 1; United Kingdom - 4; United States - 11; Uruguay - 1.

Respectfully submitted,



C. J. Lapp  
Director of Fellowships and  
Deputy Director,  
Office of Scientific Personnel

NASA POSTDOCTORAL AND SENIOR POSTDOCTORAL

RESIDENT RESEARCH ASSOCIATESHIP PROGRAM

Administered by the

National Academy of Sciences-National Research Council

(Contract SC-NSR-09-012-901)

Status Report No. 2: December 1, 1964 - February 28, 1965

Institute for Space Studies, New York City

Menachem DISHON (see status report for Sept. 17, 1963 - March 17, 1964) was awarded a renewal of his Associateship for an additional 12 months beginning on December 5, 1964. The Director of the Institute stated that Dr. Dishon's research in oceanographic depths has shown good progress and the continuation of his work in this field is believed to be of benefit to their program of research.

Shoji KATO (see last status report) continued on tenure of his Associateship which will terminate September 2, 1965.

Albert Richard SALMONA was appointed to an Associateship for 12 months, beginning February 24, 1965, to conduct research in Astrophysics. He received his Ph.D. degree in 1962 from the Sorbonne University in Paris, specializing in atomic physics. He came to the Institute from the Observatoire de Meudon, Centre National de la Recherche Scientifique, Seine et Oise, France.

Harold L. STOLOV, a United States citizen, was awarded a Senior Postdoctoral Associateship for 12 months, and began his research activities on February 1, 1965. His program at the Institute concerns (1) Ionosphere - magnetosphere interactions using f min data, riometer data and stellite data; (2) factors influencing the variation of geomagnetic activity; (3) question of the extra-terrestrial origin for the 26 month oscillation. Dr. Stolov received the Ph.D. degree in 1953, from New York University, specializing in Physics and Meteorology. He has taught at several colleges, most recently in the Physics Department at the City College of New York. He is a member of Phi Beta Kappa and Sigma Xi, The New York Academy of Sciences, American Geophysical Union, American Physical Society, American Meteorological Society, American Meteorological Society, and American Association of Physics Teachers. He listed several publications in professional magazines.

James C. G. WALKER (see last status report) continued his associateship, which will terminate July 5, 1965.

Goddard Space Flight Center, Greenbelt, Maryland

Malcolm J. T. CAMPBELL (see last status report) continued to pursue his Associateship, which will terminate September 23, 1965.

Sergio CANTARANO (see status report for September 17, 1963 - March 17, 1964) was given a second extension of his Associateship for eight months, beginning December 10, 1965 to continue his participation in the experimental program of magnetic field studies of the interplanetary medium on the IQSY Pioneer satellite. Dr. Meredith stated that Dr. Cantarano is also working on the IMP D&E program, which will place an Imp type satellite in a lunar orbit in 1965; that he has designed all the board electronics and data processing circuitry for this experiment, and that Dr. Ness is anxious to have him continue his outstanding work for the next several months.

Ian M. CHESHIRE (see last status report) continued tenure of his renewed Associateship which will end September 23, 1965.

Kerstin FREDGA (see status report for Sept. 17, 1963 - March 17, 1964) was awarded a twelve-month renewal of her Associateship beginning January 2, 1965. She has performed laboratory studies leading to the design of an experiment to study the sun. Dr. Meredith requested that her appointment be renewed to enable her to complete the work on the flight experiments to be made and study the data obtained.

Guy Marcel ISRAEL (see last status report) continued to pursue his Associateship, which will terminate May 1, 1965.

Han-shou LIU (see last status report) continued on tenure of his Associateship, which will end October 15, 1965.

Mordehai LIWSHITZ, a citizen of Israel, began a twelve month Associateship appointment on November 2, 1964, after receiving his Ph.D. degree from the University of Maryland, specializing in Physics and Mathematics. He is a member of Sigma Xi and has been a graduate research and teaching assistant in several institutions. He came to the United States in 1959 to conduct research at the University of Nebraska, where he was in charge of the Cosmic Ray Station. His research project at Goddard pertains to the Distribution of Hydrogen and Helium in the Earth's Upper Atmosphere.

Carl Sigurd NILSSON (see last status report) remained on tenure of his renewed Associateship, which will continue until October 14, 1965.

Ian W. ROXBURGH (see last status report) completed his two month Associateship appointment as of January 30, 1965.

Theodore W. SPEISER (see last status report) continued on tenure. His appointment will terminate October 4, 1965.

James Henry UNDERWOOD (see status report for Sept. 17, 1963 - March 17, 1964) was renewed for an additional 12 months as an Associate, beginning December 2, 1965; order to continue his investigations directed toward the development of X-ray optics. The Chief of the Space Sciences Division stated that Dr. Underwood is making important contributions to this work.

Franco VARESEO, a citizen of Italy was appointed a Postdoctoral Resident Research Associate for 12 months, beginning January 4, 1965, to conduct research on electronic instrumentation for experimental investigation of pressure, temperature, density and composition of the atmospheres of earth and other planets. He holds the degree Laurea Ingegneria in the field of electronics from the Politecnico di Torino in Italy and has been engaged in research at that institution since 1961.

Kashyap V. VASAVADA, (see last report) continued to pursue his research Associateship which will terminate September 20, 1965.

Ames Research Center, Moffett Field, California (Biosciences)

Robert C. BOYLE (see last status report) continued on tenure of his associateship, which will be completed October 15, 1965.

Paul Xavier CALLAHAN, Jr. (see last status report) continues his 12-month appointment which will end November 16, 1965.

Robert P. CARUTHERS (see last status report) completed the 5-month extension of his Associateship as of February 10.

Rosita F. ESTABLE (see last status report) continues tenure of her third year associateship, conducting research on effects of different environmental influence upon the nervous system.

Torquato GUALTIEROTTI (see last status report) continued to pursue his renewed Associateship, which will terminate October 7, 1965.

Friedrich H. LEIBACH (see last status report) is still on tenure of his Associateship which continues to November 15, 1965.

Nasser Shokoushi NEJAD (see last status report) continued his Associateship renewal which will terminate September 22, 1965.

Henry L. SPEER (see last status report) continued on tenure of his Associateship which will be completed September 2, 1965.

Ames Research Center, Moffett Field, California (Physical Sciences)

Barbara Wayne ABRAHAM (see last status report) continued to pursue her Associateship, which is to terminate September 27, 1965.

Dhanjoo N. GHISTA, who is a citizen of India, was appointed as an Associate for 12 months beginning December 10, 1964, to conduct research on the structural degradation of spacecraft resulting from micrometeoroid damage. He has completed the requirements for the Ph.D. Degree at Stanford University, specializing in structural mechanics.

Ronald J. P. LYON (see status report for September 17, 1963 - March 17, 1964) was awarded a renewal of his Associateship for 12 months beginning on February 17, 1965, to enable him to continue research on the infrared radiance from planetary rocks and minerals. It was reported that he has displayed outstanding capabilities for doing scientific research and that his progress has been most satisfactory despite unavoidable delays in the installation of certain equipment for his use. An increased stipend was recommended and granted in recognition of Dr. Lyon's accomplishments.

Michael J. RYCROFT (see status report for Sept. 16, 1963 - March 17, 1964) was given an eight months extension of his appointment, beginning January 31, 1965, to enable him to bring to conclusion his research in space physics. It was reported that Dr. Rycroft has made a significant contribution to the Center's studies of natural very low frequency electromagnetic phenomena and is in the process of collecting data of considerable significance.

Richard A. SCHMIDT (see last status report) continued to pursue his renewed appointment, which will terminate September 15, 1965.

James M. SHORT (see last status report) continued on tenure of his Associateship which will terminate October 18, 1965.

George C. Marshall Space Flight Center, Huntsville, Alabama

Satish Chandra MATHUR (see status report for September 17, 1964 - March 17, 1964) received an extension of his Associateship for six months, beginning February 10, 1965 in order to complete his project on investigation of conduction mechanisms in organic semiconductors. His division chief reported that Dr. Mathur is enthusiastic and thorough in his work and has been helpful and cooperative with others in the laboratory.

Langley Research Center, Hampton, Virginia

Toshikazu KUROSAKI, a citizen of Japan, was appointed to an Associateship for 12 months, and entered on tenure February 19, 1965. He will conduct research on Radiation Effects on Polymers. He received a Doctor of Engineering degree in 1962 from the Tokyo Institute of Technology, specializing in Polymer Chemistry. Since June 1963 Dr. Kurosaki has been engaged in postdoctoral research at the University of Notre Dame sponsored by NASA (NsG339 Project on Heat Resistant-Polymers). He has written a number of articles which have been published in professional journals in Japan and listed several others which were presented at society meetings and have been accepted for publication.

Ja Hyun LEE (see last status report) continued to pursue his 12-months Associateship which he began on November 6, 1964.